

REMARKS

Status of the Claims

In the Office Action, claims 1-41 were noted as pending in the application. Claims 1 and 13-23 are withdrawn. Claims 2-12 and 24-41 are rejected.

A. Summary of Cited References

Before addressing the Examiner's rejections, a brief summary of the cited references is provided.

U.S. Patent number 6,272,150 to Hrastar, et. al. ("Hrastar")

Hrastar relates to recording and collecting the installed locations of cable modems in a cable data network. Abstract. Software manages a database of installation and status information. Id. Responsive to a request, the software provides the installation and status information to a network manager. Id. The information is displayed as a map showing the topology of a cable modem's location in the network with respect to other modems and components of the network. Id.

B. Response to Examiner's remarks

In responding to Applicant's response to the previous office action, Examiner stated that Applicant argued the Hrastar does not "disclose that the performance data corresponds to QAM samples; and that the samples of QAM data are combined into a plot and then transmitted to a remote location." Examiner's statement does not reflect Applicant's argument advanced in response to the previous office action.

In the previous office action, Applicant made a distinction between performance data, or which QAM symbol samples are an example, and the static data discussed in the reference. As discussed in the response to the previous office action, the reference discussed maintaining a database that included information related to locations of cable modems. These location data include information of a cable modem's physical location as well as its logical, or network location. The location information can then be indicated on a graphical map to present a visual display of the location of the cable modems. Thus, the information discussed in the cited reference is static information that corresponds to where the device is.

In contrast, claim 2 of the present application recites performance data. As recited in the claim, performance data is collected at each of a plurality of user devices. Performance data is not the same thing as location data. An analogy that may help clarify the difference in performance and location data would be that a global positioning satellite may provide information relative to the location of an automobile, but would not provide information relative to the horsepower output, fuel consumption, speed and efficiency of the automobile. These data would be properly deemed performance data of the automobile. Thus, like information such as an automobile's fuel consumption, speed and efficiency are performance data and not location information, network performance data of a network device is not the same as location information of a device. Accordingly, the cited reference does not disclose performance data and the requesting, collecting, assembling, sending, receiving and mapping thereof as recited in claim 2 of the present application. Therefore, all of the elements of claim 2 are not found in the cited reference and withdrawal of the rejection is respectfully requested. Furthermore,

similar analysis as applied to claim 2 applies to claims 13, 24 and 35. Therefore, they too patentably distinguish over the reference and withdrawal of the rejection is respectfully requested.

In addition, since none of the independent claims are rejected as obvious, and Applicant has demonstrated that none of them are anticipated by the cited reference, none of the dependent claims are obvious. That notwithstanding, U.S. Application 2002/0064233 to Terreault, et. al. ("Terreault"), the reference that is newly-cited by Examiner, does not teach the remote collection of QAM symbol samples as performance data. Terreault discusses analyzing QAM signals, but does not discuss a method and system for remotely collecting QAM samples at a user device, assembling them into packets, sending the packets to another location, and analyzing the information in the packets. Indeed, Terreault discusses that most of the laboratory equipment that might be useful for analyzing QAM signals is "not in-field intended." [0008] Thus, neither Terreault nor Hraster, either alone or in combination, teach or suggest all of the elements in the claims, and Terreault actually teaches away from the subject matter recited in the claims because it teaches that in-field analysis equipment is desired rather than remotely collecting data and transmitting it via packets for analysis at another location. Accordingly the dependent claims 5-6, 12, 25-26, 34 and 36-37 are not obvious over the Hraster in view of Terreault and withdrawal of the rejection is respectfully requested.

Applicant traverses Examiner's making the office action final. Terreault is newly-cited in the most recent office action. The previous amendment made a correction to a minor typographical error in claim 2, and did not cause the new citation of Terreault. Thus, Terreault is a new ground for rejection and the most recent office action should not be made Final. Accordingly, Applicant respectfully requests withdrawal of the Final status of the present office action.

Applicant's arguments advanced in response to the previous office action are given below for Examiner's convenience.

C. Rejection of Claims 1, 5-8 and 17 under 35 U.S.C. § 102(e).

On page 2 of the Office Action, claims 2-4, 7-10, 24, 27-28, 30-32, 35, 38-39 and 41 are rejected under 35 U.S.C. § 102(b) as being anticipated by Hraster. The reasons that the claims patentably distinguish over the reference are addressed below.

Claim 2 recites "... compiling a table of information related to a plurality of user devices connected to the network, said table configured for associating multiple samples of network performance data, wherein each of the samples corresponds to one of the user devices, with an identifier of the user device to which each said sample of performance data corresponds" As discussed above, Hraster discusses that a database is maintained that includes information related to physical and logical locations of a cable modem, and that the locations may be displayed on a map showing the topology of the network. Examiner has not pointed to, and Applicant cannot find, a discussion in Hraster of a database that contains performance data of individual cable modems. As described in the specification, performance data corresponds to QAM symbols. QAM symbols have an I and Q component as known in the art. Essentially, multiple samples of the QAM symbols transmitted and received during a sample period are the performance data.

Thus, the performance data comprising multiple samples of QAM symbols can be plotted on an I and Q constellation chart, or map.

In contrast, the Hrastar reference discusses a process statistics table that contains information regarding the network devices, including process identifier, process description, number of users, at a given time, etc. Col. 20, lines 60-67. Screen shots shown in FIGS. 13-17 show logical connections of network elements and illustrate how their status may be displayed. Col. 21, line 1 – col. 22, line 31. This section of the Detailed Description of the Preferred Embodiment restates the text at col. 3, lines 30-42, which is the section cited by Examiner. The cited reference does not show that samples of QAM data are combined into a plot and then transmitted to a remote location. Thus, all of the recited elements of claim 2 are not found in the cited reference.

Since collection of performance data as claimed and described in the specification of the present application is not discussed in Hrastar, collecting and assembling performance data into packets is also not discussed in the reference. Column 19 of Hrastar discusses polling management information base entries to determine various statistics. The cited portion of the reference does not discuss collecting and assembling performance data into packets. Thus, it follows that the steps of sending, receiving, mapping generating and presenting the packets and performance data contained therein, are also not found in the reference. Accordingly, since all of the elements of claim 2 are not found in the reference, the reference does not anticipate claim 2. Withdrawal of the rejection is respectfully requested. In addition, Examiner rejects independent claims 24 and 35 for reasons similar to those used in the rejection of claim 2. Thus, based on the above discussion, claims 24 and 35 also distinguish over the reference. Withdrawal of the rejection is respectfully requested. Claims 3-4, 7-10, 27-28, 30-32, 38-39 and 41 depend from one of the independent claims discussed above. Thus, they too are not anticipated by the reference. Withdrawal of the rejection is respectfully requested.

D. Rejection of claims

On page 4 of the Office Action, claims 5-6, 11-12, 25-26, 29, 33-34, 36-37 and 40 are rejected as being obvious over Hrastar in view of Official Notice. The reasons that the claims patentably distinguish over the reference are addressed below.

E. The Claims are not Obvious over the Cited References

Applicant respectfully submits that the subject matter of the claims patentably distinguish over the cited references. Under MPEP § 2142, for an examiner to establish a *prima facie* case of obviousness, “three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant’s disclosure.” If any of these three criteria are not met, the Examiner has not met the burden of establishing a *prima facie* case of obviousness, and the rejection should be withdrawn.

Furthermore, each dependent claim includes all of the limitations of the independent claim from which it depends. If an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Applicant respectfully submits that the burden of establishing a *prima facie* case of obviousness has not been met.

F. Claims are not obvious over the cited references

The claims analyzed above in section B are independent claims and they patentably distinguish over the references as discussed above. All of the other rejected claims depend from these independent claims and therefore contain all of the limitations contained in their respective base claims. Accordingly, under MPEP §§2142 §2143.03, these dependent claims also patentably distinguish over the references and withdrawal of the rejection is respectfully requested.

In addition, with respect to claims 5, 25 and 36, as discussed above, Hrastra does not disclose performance data as being I and Q samples that correspond to QAM symbols. Thus, all of the elements of the rejected claims are not found in the cited references, either alone or in combination.

Furthermore, there is not a suggestion to combine references to arrive at the claimed subject matter because there is no teaching of combining the I and Q values for the symbols transmitted and/or received during a given period to form performance data that is then transmitted in packets. Examiner takes Official Notice that QAM modulation and constellation plots are known in the art because Applicant stated that such are known in the art. While constellation plots may be known, Applicant did not state that the plotting of multiple samples of QAM data, i.e., performance data, on a plot was known. Moreover, Applicant did not state that the collecting and assembling of performance data at each of a plurality of user devices and sending such data to a remote location wherefrom a request for such performance data was requested was known in the art at the priority date of the present application. Therefore, there is no suggestion to combine the cited reference with the statement in the application. Applicant did not state that the claimed elements are known and thus Official Notice that knowledge or constellation plots generally cannot be taken. Withdrawal of the rejection is respectfully requested.

SUMMARY

For all the reasons advanced above, Applicant respectfully submits that the application is in condition for allowance and that action is earnestly solicited.

If the Examiner believes that there are any issues that can be resolved by a telephone conference, or that there are any informalities that can be corrected by an Examiner's amendment please contact the undersigned at the mailing address, telephone, facsimile number, or e-mail address indicated below.

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